

Coronavirus Disease 2019 (COVID-19)

Evaluating and Reporting Persons Under Investigation (PUI)

Summary of Recent Changes

Revisions were made on February 27, 2020, to reflect the following:

- Information updated in the “Criteria to Guide Evaluation of PUI for COVID-19” section.

Updated February 27, 2020

Limited information is available to characterize the spectrum of clinical illness associated with coronavirus disease 2019 (COVID-19). No vaccine or specific treatment for COVID-19 is available; care is supportive.

The CDC clinical criteria for a COVID-19 person under investigation (PUI) have been developed based on what is known about MERS-CoV and SARS-CoV and are subject to change as additional information becomes available.

Healthcare providers should obtain a detailed travel history for patients being evaluated with fever and acute respiratory illness. CDC guidance for evaluating and reporting a [PUI for MERS-CoV](#) remains unchanged.



Contact your local or state health department

Healthcare providers should **immediately** notify their [local](#) or [state](#) health department in the event of a PUI for COVID-19.

Criteria to Guide Evaluation of PUI for COVID-19

Local health departments, in consultation with clinicians, should determine whether a patient is a PUI for COVID-2019. The CDC clinical criteria for COVID-19 PUIs have been developed based on available information about this novel virus, as well as what is known about [Severe Acute Respiratory Syndrome \(SARS\)](#) and [Middle East Respiratory Syndrome \(MERS\)](#). These criteria are subject to change as additional information becomes available.

Clinical Features	&	Epidemiologic Risk
Fever ¹ or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)	AND	Any person, including healthcare workers ² , who has had close contact ³ with a laboratory-confirmed ⁴ COVID-19 patient within 14 days of symptom onset
Fever ¹ and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization	AND	A history of travel from affected geographic areas ⁵ (see below) within 14 days of symptom onset
Fever ¹ with severe acute lower respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization and without alternative explanatory diagnosis (e.g., influenza) ⁶	AND	No source of exposure has been identified

Affected Geographic Areas with Widespread or Sustained Community Transmission

Last updated February 26, 2020

- China
- Iran
- Italy
- Japan
- South Korea

The criteria are intended to serve as guidance for evaluation. In consultation with public health departments, patients should be evaluated on a case-by-case basis to determine the need for testing. Testing may be considered for deceased persons who would otherwise meet the PUI criteria.

Recommendations for Reporting, Testing, and Specimen Collection

Updated February 3, 2020

Healthcare providers should **immediately** notify both infection control personnel at their healthcare facility and their local or state health department in the event of a PUI for COVID-19. State health departments that have identified a PUI should immediately contact CDC's Emergency Operations Center (EOC) at 770-488-7100 and complete a COVID-19 PUI case investigation form available below.

- [Download fillable PDF form](#) 
- [Download Microsoft Word form](#) 

CDC's EOC will assist local/state health departments to collect, store, and ship specimens appropriately to CDC, including during afterhours or on weekends/holidays.

Testing for other respiratory pathogens should not delay specimen shipping to CDC. If a PUI tests positive for another respiratory pathogen, after clinical evaluation and consultation with public health authorities, they may no longer be considered a PUI. This may evolve as more information becomes available on possible COVID-19 co-infections.

For biosafety reasons, it is not recommended to perform virus isolation in cell culture or initial characterization of viral agents recovered in cultures of specimens from a PUI for COVID-19.

To increase the likelihood of detecting COVID-19, CDC recommends collecting and testing multiple clinical specimens from different sites, including two specimen types—lower respiratory and upper respiratory. Additional specimen types (e.g., stool, urine) may be collected and stored. Specimens should be collected as soon as possible once a PUI is identified, regardless of time of symptom onset. [Additional guidance for collection, handling, and testing of clinical specimens is available.](#)

Interim Healthcare Infection Prevention and Control Recommendations for Persons Under Investigation for COVID-19

- [Interim Infection Prevention and Control Recommendations for Patients with Confirmed COVID-19 or Persons Under Investigation for COVID-19 in Healthcare Settings](#)
- [Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings](#)
- [CDC Health Alert Network Update and Interim Guidance on Outbreak of 2019 Novel Coronavirus \(2019-nCoV\)](#)

Footnotes

¹Fever may be subjective or confirmed

²For healthcare personnel, testing may be considered if there has been exposure to a person with suspected COVID-19 without laboratory confirmation. Because of their often extensive and close contact with vulnerable patients in healthcare settings, even mild signs and symptoms (e.g., sore throat) of COVID-19 should be evaluated among potentially exposed healthcare personnel. Additional information is available in CDC's [Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 \(COVID-19\)](#).

³Close contact is defined as—

a) being within approximately 6 feet (2 meters) of a COVID-19 case for a prolonged period of time; close contact can occur while caring for, living with, visiting, or sharing a healthcare waiting area or room with a COVID-19 case

– or –

b) having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on)

If such contact occurs while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection), criteria for PUI consideration are met.

Additional information is available in CDC's updated [Interim Infection Prevention and Control Recommendations for Patients with Confirmed COVID-19 or Persons Under Investigation for COVID-19 in Healthcare Settings](#).

Data to inform the definition of close contact are limited. Considerations when assessing close contact include the duration of exposure (e.g., longer exposure time likely increases exposure risk) and the clinical symptoms of the person with COVID-19 (e.g., coughing likely increases exposure risk as does exposure to a severely ill patient). Special consideration should be given to healthcare personnel exposed in healthcare settings as described in CDC's [Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with COVID-19](#).

⁴Documentation of laboratory-confirmation of COVID-19 may not be possible for travelers or persons caring for COVID-19 patients in other countries.

⁵Affected areas are defined as geographic regions where sustained community transmission has been identified. Relevant affected areas will be defined as a country with at least a CDC Level 2 Travel Health Notice. See all [COVID-19 Travel Health Notices](#).

⁶Category includes single or clusters of patients with severe acute lower respiratory illness (e.g., pneumonia, ARDS) of unknown etiology in which COVID-19 is being considered.

Additional Resources:

- [State health department after-hours contact list](#) 
- [Directory of Local Health Departments](#) 
- [World Health Organization \(WHO\) Coronavirus](#) 
- [WHO guidance on clinical management of severe acute respiratory infection when COVID-19 is suspected](#) 